

# ECOM: Effective communication in outbreak management: development of an evidence-based tool for Europe

Dominic McVey
Director
Word of Mouth Research UK

Dom@womresearch.org.uk









# **ECOM** lead

# **Prof. Jan Hendrik Richardus**

Erasmus University MC Rotterdam, the Netherlands



# Who am I?

## **Public health researcher:**

- Public health issues and National campaigns Smoking, Illegal Drugs, HIV/ AIDS, Obesity, Immunisation,
- Social Research and evaluation
- Social Inequalities, vulnerable groups, hard to reach groups, travellers, sex workers,
- Social Marketing

**Worked on the ECOM project - Work Package 3 – Social Marketing Analysis** 





# Outline

- Overview of ECOM
- Look at some of the work on audience understanding and targeting
- "Review of reviews" on compliance with vaccination among healthcare workers



# What is ECOM?

We still have to communicate the need for large-scale measures such as vaccination and antiviral therapy -and increase its acceptance.

For effective behavioural and communication strategies, we need to integrate: *social, behavioural, communication and media sciences.* 

ECOM brings together these disciplines to develop an evidence-based behavioural and communication package

For Health professionals and agencies throughout Europe



# The different elements of **ECOM**

4 year project - 2012-2015 WP1: Dealing with the 2009 H1N1 pandemic: Time-dependent influences of epidemiology and risk communication on human behaviour

WP2: Media and social media content analysis of the H1N1 pandemic

WP3: Social Marketing analysis of vaccination behaviour, audience segmentation, and service delivery

WP4: Vaccination knowledge, attitudes, risk perception & vaccination non-response

WP5: Acceptance of preventive measures: Discrete Choice Experiments (DCE) risk versus disease risk.

WP6: Vaccine-resistant group analysis

WP7: Integration of key findings from WP 1-6



WP8: Testing effective behavioural intervention and communication strategies

WP9: Building of web application tools

**WP10: Tool finalisation** 



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4 year project - 2012-2015 WP1: Dealing with the 2009 H1N1 pandemic: Time-dependent influences of epidemiology and risk communication on human behaviour

WP2: Media and social media content analysis of the H1N1 pandemic

WP3: Social Marketing analysis of vaccination behaviour, audience segmentation, and service delivery

WP4: Vaccination knowledge, attitudes, risk perception & vaccination non-response

WP5: Acceptance of preventive measures: Discrete Choice Experiments (DCE) (how people trade-off vaccination risk (or anti-viral therapy risk) versus disease risk)

WP6: Vaccine-resistant group analysis

WP7: Integration of key findings from WP 1-6



WP8: Testing effective behavioural intervention and communication strategies

WP9: Building of web application tools

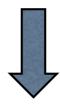
**WP10: Tool finalisation** 



# Main focus for ECOM is the **General Population**

## However

Most of the check lists and guides can be applied to interventions targeted at **Health Care Workers** (HCWs)



The same principles that inform the design and evaluation of pandemic interventions for the general population can be applied to HCWs



# Checklists and tools

ECOM has developed 19 proto tools/Checklists

These will be tested in the next phase of the Programme. 2014-2015

These tools have all been developed to assist those responsible for developing strategies and plans



Checklists and tools

When to use the media

Set of BEHAVIOURAL goals for three key audiences

Designing Information Programmes

What influences behaviour - Key Factors

Checklist for assessing the strength of Planning for a behavioural intervention

Cost /Value Matrix

Guide to Segmentation

Behavioural Economics Checklist Selecting models and Theories of Behaviour

Chann

Ensuring effective
engagement in
Pandemic
Communication and
behavioural Influencing
programme

Guide to Customer Journey Mapping

# Social Marketing Analysis

WP3: Social Marketing analysis of vaccination behaviour, audience segmentation, and service delivery



# Social Marketing Analysis

# **Key attributes of Social Marketing**

- 1: BEHAVIOURAL GOALS
- 2: CUSTOMER UNDERSTANDING
- 3: THEORY BASED
- 4: 'INSIGHT'
- 5: 'EXCHANGE'
- 6: 'COMPETITION'
- 7: SEGMENTATION
- 8: INTERVENTION & MARKETING MIX

National Benchmark Criteria, National Social Marketing Centre - England



# **Understanding the Customer / Patient**



You never really understand a person until you consider things from his point of view . . . until you climb into his skin and walk around in it.

Atticus Finch - To Kill a Mocking Bird by Harper Lee

# Walk in the customers

think and feet whatets like to be a service user or customer



We need to exploit customer insight as a 'strategic asset'



# Looked at three countries Italy, Hungary and the United Kingdom

Site visits, interviews with key players, document reviews,

Looked at the use of audience research, segmentation, messaging and evaluation during the 2009 pandemic





# Social Marketing Analysis

# Look at the "competition" The ant-vaccination lobby

# **SOCIAL MEDIA**







34.6k

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1.4k

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28

in Share

1.4k

**Submit** 

100

Q +1

New Posts

Most Popular How To Use Google Glass Lists

Most Miserable Cities



10 July 2013 Last updated at 12:26



## **Swansea measles epidemic: Worries** MMR uptake after outbreak

Some parents are still ignoring the message to immunise their children against measles, an inquiry into the Swansea outbreak has heard.

A GP at the centre of the recent epidemic said some people had been invited to get their children vaccinated with the MMR jab 15 times.

Ian Millington gave evidence to the Welsh assembly's health committee.

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The inquiry into the outbreak began on Wednesday, a week after it was declared over

More than 1,200 people fell ill, 88 visited hospital and one person died in the outbreak which began in November.

The response cost Abertawe Bro Morgannwg University Health Board an estimated £470,000.

The health board offered 35,000 vaccinations, including more than 5,000 for 10 to 18-year-olds - the main age group affected.

Last month the board said 95% of children and teenagers in Swansea, Neath Port Talbot and Bridgend had received one MMR jab for the first

So-called herd immunity is reached when 95% have had both doses.



Thousands of people had MMR jabs



Measles epigenno officially over

Measles caused man's fatal pneumonia

Measles vaccination milestone hit



Steven Salzberg, Contributor

Celebrating good science by fighting pseudoscience and bad medicine

+ Follow (102)

PHARMA & HEALTHCARE | 7/23/2012 @ 6:00AM | 64,612 views

# **Anti-Vaccine Movement Causes** The Worst Whooping Cough Epidemic In 70 Years



+ Comment Now + Follow Comments

The great northwest of the U.S. is known for its natural beauty. It's also a high-tech region with a highly educated public - not exactly the kind of place one would expect to fall for the anti-science rhetoric of the anti-vaccine movement.





# Key findings from the segmentation and customer journey mapping of three countries

(Italy, UK and Hungary)

- 1. Lack of audience research
- 2. Informational campaigns'. Focus on reassurance, prevention behaviours and sources of help (there was little evidence that much consideration had been given to the emotional appeal in communications)
- 3. No explicit use of **behaviour change theory**.
- 4. Key **message givers** varied between countries: politicians and health experts different impacts in terms of perceptions of trust
- **5. internet-based communication** was problematic and under-developed HOWEVER the Oppositional / anti-vaccine groups much more effective in using social media/ blogosphere
- 6. Limited *evaluation* of communication interventions
- 7. Limited understanding and no use of **segmentation** for communications.
- 8. No use and little understanding of *customer journey mapping*



# Social Marketing Analysis

Vaccination Behaviour Knowledge, attitudes risk perception reasons for resistance



Incentives / Disincentive to vaccinate/ or use anti-virals and Service delivery





Audience Segmentation



**Customer Journey Mapping** 





# **Submitted Publication**

# 'By failing to prepare you are preparing to fail': lessons from the 2009 H1N1 'swine flu' pandemic

Adam Crosier
Dominic McVey
Jeff French

Word of Mouth Research, Word of Mouth Research, Strategic Social Marketing



# WP4: Vaccination knowledge, attitudes, risk perception & vaccination non-response

Helene Voeten Municipal Public Health Service Rotterdam-Rijnmond The Netherlands









# Determinants of healthcare workers' compliance with influenza vaccination: a compilation of published reviews

Dr. Marloes Bults, PhD (<u>m.bults@rotterdam.nl</u>)
Prof. dr. Jan Hendrik Richardus, PhD (<u>j.richardus@erasmusmc.nl</u>)
Dr. Hélène Antoine Claire Marie Voeten, PhD (<u>h.voeten@rotterdam.nl</u>)

Submitted to a special issue in Disaster Medicine and Public Health Preparedness.









# Determinants of vaccination uptake among health care workers Compilation of 8 review articles

First author	Year of publication	Number of studies included	Seasonal or pandemic influenza	Geographi cal restriction	Year of publication of included studies	Restriction in type of HCW
Aguilar-Diaz	2011	30	pandemic	-	2009-2011	-
Hollmeyer	2009	25	seasonal	-	1980-2008	HCW in hospitals
Hofmann	2006	25	seasonal	-	1985-2002	-
La Torre	2011	9	seasonal	Italy	1994-2011	Nurses and ancillary workers
Toronto	2010	12	Seasonal		2003-2009	Nurses
Prematunge	2012	20	pandemic	-	2010-2011	-
Riphagen- Dalhuisen	2012	13	seasonal	-	1987-2007	HCW in hospitals
Zhang	2010	12	seasonal	-	2003-2009	Nurses





Reasons for compliance / factors positively influencing compliance

- Belief of personally being at risk
- Belief that influenza is severe
- Belief in vaccine's efficacy (protection self/relatives/ patients)

Reasons for non-compliance / factors negatively influencing compliance

- Concerns vaccine safety/side effects
- Doubts about efficacy
- Belief rapid vaccine development compromising safety
- Influenza is not serious/fatal





Reasons for compliance / factors positively influencing compliance

High knowledge regarding influenza and influenza vaccination

- Being aware of recommendations
- -Medical journals are the main source of information

Reasons for non-compliance / factors negatively influencing compliance

Low knowledge regarding influenza and influenza vaccination

- TV is the main source of information on influenza

belief that the media had exaggerated the pandemic situation.





Reasons for compliance / factors positively influencing compliance

### **Cues to action**

- 1. Easy access to vaccination + vaccination free of charge
- 2. Receiving adequate free time for vaccination (seasonal influenza)
- 3. Social influences
  - endorsement of friends, family, doctor, employer, colleagues, supervisors, opinion leaders, or political figures
- 4. Peer pressure
- 5. Recommending influenza vaccination to patients
- 6. Past history of seasonal influenza vaccination
- 7. Past history of influenza, visited a physician for respiratory illness
- 8. Allowing own children/family to be vaccinated



## Cues to 'inhibition'

- 1. Inconvenient delivery of the vaccination
- 2. Lack of availability
- 3. Receiving or having time for vaccination
- 4. Distrust of public health authorities
- 5. Rejection of prime minister to be vaccinated





Reasons for compliance / factors positively influencing compliance

## **Demographics**

- 1. Being a physician (as opposed to being a nurse/support staff)
- 2. Male
- 3. Higher age
- 4. Longer duration of employment
- 5. Higher salary
- 6. Higher education
- 7. Little absenteeism
- 8. Being affected by a chronic disease.
- 9. Being married

Reasons for non-compliance / factors negatively influencing compliance

**Demographics** 

the opposite of the factors mentioned in the left column



Recommendations from the review A comprehensive, well-supported, multifaceted intervention programme can raise uptake substantially / sustainably

## Educate HCWs in influenza vaccination campaigns about:

- 1. The true risk of vaccine-related side-effects
- 2. The effectiveness of the vaccine;
- 3. The severity of influenza and the risk of complications or death for patients.
- 4. HCWs role in influenza transmission and prevention to protect patients, not get ill themselves thus preserving an adequate healthcare work force, contribute to herd immunity, and set an example for others);

# <u>Vaccination recommendations</u>. This should be combined with other strategies, such as

- 1. improved access to vaccination,
- 2. the use of incentives or disincentives,
- 3. the use of role models.

Mandatory vaccination programs for HCW have reached highest uptake levels of over 98%, but remain controversial.



# Questions

# Dom@womresearch.org.uk

